

March 10, 2003

Patricia Niemiec
Weyerhaeuser
2900 North Franklin Road
Indianapolis, Indiana 46219

Re: Registered Construction and Operation Status,
097-15474-00245

Dear Ms. Niemiec:

The application from Weyerhaeuser, received on December 31, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following emissions units, to be located at 2900 North Franklin Road, Indianapolis, Indiana 46219 are classified as registered:

Two (2) natural gas fired Cleaver Brooks boilers, installed March 31, 1961, each with a maximum heat input capacity of 14.7 million Btu per hour (MMBtu/hr).

The following conditions shall be applicable:

- (a) Pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plan), any person responsible for operating any facility required to obtain a Permit shall prepare and maintain a Preventive Maintenance Plan which includes the following:
 - (1) Identification of responsible individuals for inspecting, maintaining and repairing emission control devices.
 - (2) Description of items and conditions that will be inspected and an inspection schedule.
 - (3) Identification of replacement parts in inventory for quick replacement.
- The Preventive Maintenance Plan shall be submitted upon request and subject to review and approval by OES.
- (b) Pursuant to 326 IAC 2-6 (Emission Reporting), the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

- (c) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
- (1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (d) Pursuant to 326 IAC 6-2-2 (Particulate Emissions Limitations for Sources of Indirect Heating), particulate emissions from indirect heating facilities shall be limited by the following equation:

$$Pt = 0.87/Q^{0.16} = 0.87/14.7^{0.16} = 0.56$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Therefore, particulate emissions from the Cleaver Brooks natural gas fired boiler shall not exceed 0.56 pounds per million Btu (lbs/MMBtu).

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality and the Office of Environmental Services that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015
and
Office of Environmental Services
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez, Administrator

aco

cc: File, Marion County
Air Compliance, Matt Mosier
IDEM, Mindy Hahn
Permits, Angelique Oliger

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	Weyerhaeuser
Address:	2900 North Franklin Road
City:	Indianapolis, Indiana 46219
Authorized individual:	Patricia Niemiec
Phone #:	(317) 357-2900
Registration #:	R097-15474-00245

I hereby certify that Weyerhaeuser is still in operation and is in compliance with the requirements of Registration 097-15474-00245.

Name (typed):
Title:
Signature:
Date:

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Weyerhaeuser
Source Location: 2900 North Franklin Road, Indianapolis, Indiana 46219
County: Marion
SIC Code: 2653
Operation Permit No.: 097-15474-00245
Permit Reviewer: Angelique Oliger

The Office of Environmental Services (OES) has reviewed an application from Weyerhaeuser relating to the construction and operation of two (2) boilers.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted facilities/units:

Two (2) natural gas fired Cleaver Brooks boilers, installed March 31, 1961, each with a maximum heat input capacity of 14.7 million Btu per hour (MMBtu/hr).

Enforcement Issue

- (a) IDEM and OES are aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) OES is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 31, 2001.

Emission Calculations

See Appendix A (two pages) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.98
PM-10	0.98
SO ₂	0.08
VOC	0.71
CO	10.82
NO _x	12.88
HAPs	0.23

HAP's	Potential To Emit (tons/year)
hexane	0.23

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NO_x is equal to or greater than ten (10) tons per year and equal to or less than twenty-five (25) tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than twenty-five (25) tons per year. Therefore, the source is registered and subject to the provisions of 326 IAC 2-5.5.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
Ozone	maintenance attainment
CO	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.98
PM10	0.98
SO ₂	0.08
VOC	0.71
CO	10.82
NO _x	12.88
Single HAP	0.23
Combination HAPs	0.23

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. Construction of the two (2) natural gas fired boilers commenced before June 9, 1989. Therefore, the boilers are not subject to 40 CFR Part 60 Subpart Dc.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

This source is subject to 326 IAC 1-6-3 because it is required to obtain a Permit. Any person responsible for operating any facility required to obtain a Permit shall prepare and maintain a Preventive Maintenance Plan which includes the following:

- (a) Identification of responsible individuals for inspecting, maintaining and repairing emission control devices.
- (b) Description of items and conditions that will be inspected and an inspection schedule.
- (c) Identification of replacement parts in inventory for quick replacement.

The Preventive Maintenance Plan shall be submitted upon request and subject to review and approval by OES.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)

This source is not a major source. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

The operation of the boilers will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs, and the construction of the boilers occurred before July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO_x and is located in Marion County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-2-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The Cleaver Brooks natural gas fired boiler is subject to the provisions of 326 IAC 6-2-1(b) because it is located in Marion County and was constructed prior to September 21, 1983.

Particulate emissions from indirect heating facilities shall be limited by the following equation:

$$Pt = 0.87/Q^{0.16} = 0.87/14.7^{0.16} = 0.56$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Therefore, particulate emissions from the Cleaver Brooks natural gas fired boiler shall not exceed 0.56 pounds per million Btu (lbs/MMBtu). The combustion of natural gas yields negligible particulate emissions. Therefore, the boilers are in compliance with 326 IAC 6-2-4.

326 IAC 7-1 (Sulfur Dioxide Emission Limitations)

This rule does not apply to this source because the potential to emit of each individual unit is less than 25 tons per year or 10 pounds per hour of Sulfur Dioxide.

Conclusion

The operation of the boilers shall be subject to the conditions of the attached proposed Registration 097-15474-00245.

Appendix A: Emissions Calculations

Appendix A of TSD Page 1 of 2

Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****Company Name: Weyerhaeuser****Address City IN Zip: 2900 North Franklin Road****CP: 097-15474-00245****Reviewer: Angelique Oliger****Date: 02/19/03**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

29.4000

257.5

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	7.6	7.6	0.6	100.0	5.5	84.0
				*see below		
Potential Emission in tons/yr	0.9787	0.9787	0.0773	12.8772	0.7082	10.8168

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM emission factors are condensable and filterable.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

(SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

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Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)

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Gas Boiler
HAPs Emissions

Company Name: Weyerhaeuser
Address, City IN Zip: 2900 North Franklin Road
CP: 097-15474-00245
Reviewer: Angelique Oliger
Date: 20-Feb-03

AP-43 data given in lb/mmcft: To convert lb/mmcft-lb/mmbtu, divide by 1,020

HAPs - Metals

Emission Factor in lb/mmcft	Arsenic 2.0E-04	Beryllium 1.2E-05	Cadmium 1.1E-03	Chromium 1.4E-03	Lead 0.0E+00
Emission Factor in lb/mmBtu	2.0E-07	1.2E-08	1.1E-06	1.4E-06	0.0E+00
Potential Emission in tons/yr	2.52E-05	1.51E-06	1.39E-04	1.77E-04	0.00E+00

HAPs - Metals (continued)

Emission Factor in lb/mmcft	Mercury 2.6E-04	Manganese 3.8E-04	Nickel 2.1E-03	Selenium 2.4E-05	Total Haps Metals
Emission Factor in lb/mmBtu	2.5E-07	3.7E-07	2.1E-06	2.4E-08	
Potential Emission in tons/yr	3.28E-05	4.80E-05	2.65E-04	3.03E-06	7.49E-04

HAPs - Organics

Emission Factor in lb/mmcft	1-Methylnaphthalene 2.4E-05	3-Methylchloranthrene 1.8E-06	7,12-Dimethylbenz(a)anthracene 1.6E-06	Acenaphthene 1.8E-06	Acenaphthylene 1.8E-06
Emission Factor in lb/mmBtu	2.4E-08	1.8E-09	1.6E-09	1.8E-09	1.8E-09
Potential Emission in tons/yr	3.03E-06	2.27E-07	2.02E-07	2.27E-07	2.27E-07

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HAPs - Organics(continued)

Emission Factor in lb/mmcft	Anthracene 2.4E-06	Benz(a)anthracene 1.8E-06	Benzene 2.1E-03	Benzo(a)pyrene 1.2E-06	Benzo(b)fluoranthene 1.8E-06
Emission Factor in lb/mmBtu	2.4E-09	1.8E-09	2.1E-06	1.2E-09	1.8E-09
Potential Emission in tons/yr	3.03E-07	2.27E-07	2.65E-04	1.51E-07	2.27E-07

HAPs - Organics(continued)

Emission Factor in lb/mmcft	Benzo(g,h,i)perylene 1.2E-06	Benzo(k)fluoranthene 1.8E-06	Chrysene 1.8E-06	Dibenzo(a,h)anthracene 1.2E-06	Dichlorobenzenes 1.2E-03
Emission Factor in lb/mmBtu	1.2E-09	1.8E-09	1.8E-09	1.2E-09	1.2E-06
Potential Emission in tons/yr	1.51E-07	2.27E-07	2.27E-07	1.51E-07	1.51E-04

HAPs - Organics(continued)

Emission Factor in lb/mmcft	Fluoranthene 3.0E-06	Fluorene 2.8E-06	Formaldehyde 7.5E-06	Hexane 1.8E+00	Indeno(1,2,3-cd)pyrene 1.8E-06
Emission Factor in lb/mmBtu	2.9E-09	2.7E-09	7.4E-09	1.8E-03	1.8E-09
Potential Emission in tons/yr	3.79E-07	3.53E-07	9.47E-07	2.27E-01	2.27E-07

HAPs - Organics(continued)

Emission Factor in lb/mmcft	Naphthalene 6.1E-04	Phenanthrene 1.7E-05	Total Haps Organics	Total Haps Combined
Emission Factor in lb/mmBtu	6.0E-07	1.7E-08		
Potential Emission in tons/yr	7.70E-05	2.15E-06	2.28E-01	2.28E-01

Methodology

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton